## CLAIMS

 A hot plate unit comprising a supporting case and a substrate equipped with a temperature adjustment means; said substrate being fitted to said supporting case,

wherein the thickness of said supporting case is 50 mm or less.

The hot plate unit according to claim 1,

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- wherein said temperature adjustment means is a resistance heating element.
- The hot plate unit according to claim 1 or 2, wherein said temperature adjustment means is a cooling
  means.
- 4. The hot plate unit according to any of claims 1 to 3, wherein the ratio of the thickness 1 of said substrate to the thickness L of said supporting case satisfies  $0.02 \le 20$  1/L.
  - 5. A hot plate unit comprising a supporting case and a substrate equipped with a temperature adjustment means; said substrate being fitted to said supporting case.

wherein the ratio of the thickness 1 of said substrate to the thickness L of said supporting case satisfies  $0.02 \le 1/L$ .

- The hot plate unit according to claim 5,
- 30 wherein said temperature adjustment means is a resistance heating element.
- The hot plate unit according to claim 5 or 6, wherein said temperature adjustment means is a cooling
  means.

8. The hot plate unit according to any of claims 5 to 7, wherein the thickness of said supporting case is 50 mm or less.

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- 9. A hot plate unit comprising a supporting case and a ceramic substrate equipped with a resistance heating element composed of one or more circuit(s); said ceramic substrate being fitted to said supporting case.
- wherein the thickness of said supporting case is 50 mm or less.
  - 10. The hot plate unit according to claim 9,

wherein the ratio of the thickness 1 of said substrate \$15\$ to the thickness L of said supporting case satisfies  $0.02 \leqq 1/L\,.$ 

- 11. The hot plate unit according to claim 9 or 10, wherein:
- 20 said supporting case is equipped with a bottom plate in the lower part; and

a conductive wire connected to an end portion of said resistance heating element and/or a wiring led out of a heat-measuring element installed in said ceramic substrate are/is\_withdrawn from a through hole formed in said bottom plate.

12. The hot plate unit according to claim 11, wherein a coolant introducing pipe is disposed in said bottom plate.

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